(a) providing a curable concrete mix comprising water, sand, aggregate, and cement;

(b) selecting a mold for the masonry block, said mold being designed to form the masonry block upside down with the locator lip at the top of the block during the molding process, said mold having generally vertical side walls, an open top and an open bottom;

(c) providing a generally horizontal flat pallet for supporting the mold;

(d) positioning the mold and pallet so that the open bottom of the mold rests on the pallet and the bottom of the mold is temporarily closed by the pallet during the manufacturing process;

(e) delivering curable concrete mix into the mold through its open top;

(f) vibrating the concrete mix within the mold;

(g) compacting the concrete mix within the mold by the action of a compression head pushed down on the concrete mix through the open top of the mold, whereby the concrete mix is compressed and formed into an uncured masonry block unit having the shape imparted to it by the combined action of the sidewalls of the mold, the pallet on which the mold rests, and the compression head;

(h) separating the compression head and the mold from the uncured block by vertical movement of the compression head and mold relative to the pallet, whereby, after separation the uncured masonry unit rests on the pallet unsupported by the mold;

(i) transporting the uncured unit to a curing location;

(j) curing the uncured masonry unit at the curing location to create a cured masonry block; said cured masonry block having a block body comprising a generally vertical front surface and a back surface, said front and back surfaces being separated by a distance comprising the depth of the block; a generally planar upper surface and a lower surface, said upper and lower surfaces intersecting said generally vertical front surface and permitting generally parallel alignment between the upper surface of the block and the upper surface of

adjacent blocks in the next adjacent course of blocks when the block is formed into a wall, and first and second sidewall surfaces, each of said sidewall surfaces comprising a first part and a second part, said sidewall surface first parts extending rearwardly from the block front surface at an angle of ninety degrees or less, and the sidewall surface second parts joining their respective sidewall surface first parts to the back surface of the block body, said second parts converging toward each other and intersecting the back surface at an angle of less than ninety degrees; and a flange extending downwardly from the lower surface of the block body, said flange comprising a setback surface and a locking surface wherein the locking surface has been formed by a corresponding surface of the compression head during the molding process, said flange permitting the masonry block to be positioned over and in engagement with other masonry blocks as courses of blocks are laid one on another , thereby producing the desired setback from course to course when the masonry block is formed into a wall.

31. (New) The masonry block of claim 30 wherein the block body lower surface is formed by the compression head and one or more core forms in the mold.

32. (New) The masonry block of claim 30 wherein the locator lip is formed by a corresponding surface of the compression head during the molding process, and includes a back surface which is an extension of the back surface of the block body.

33. (New) The masonry block of claim 30 wherein the upside down cured unit is transported to a splitting station, and the block body front surface is a decorative face formed by the action of one or more splitter blades which are oriented generally perpendicularly to the upper and lower surfaces of the block body when the upside down cured unit is at the splitting location, and, as a consequence, said block body front surface is irregular, but generally rectangular and generally planar within the limits of the splitting process to produce such a surface.

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5 ~~34.~~ (New) The masonry block of claim 4 ~~33~~ wherein the block body sidewall first parts are formed by the action of one or more splitter blades which are oriented generally perpendicularly to the upper and lower surfaces of the block body when the cured unit is at the splitting location, and, as a consequence, said sidewall first parts are irregular, but generally rectangular and generally planar within the limits of the splitting process to produce such a surface.

6 ~~35.~~ (New) The masonry block of claim 1 ~~30~~ wherein the sidewall first parts intersect the sidewall second parts at a distance from the front surface equal to between about one fifth and about one quarter of the depth of the block body.

7 ~~36.~~ (New) The masonry block of claim 1 ~~30~~ wherein the locator lip is continuous, and extends substantially from sidewall to sidewall.

8 ~~37.~~ (New) The masonry block of claim 1 ~~30~~ wherein the vertical mold surfaces corresponding to the block body sidewalls comprise one or more substantially vertical flanges, and the block body side walls include a corresponding number of substantially vertical grooves as a consequence of the presence of the vertical flanges during the molding process.

9 ~~38.~~ (New) The masonry block of Claim 1 ~~30~~ in which the upper surface of the upright block is solid and uninterrupted.

10 ~~39.~~ (New) The masonry block of Claim 1 ~~30~~ which is vertically cored.

11 ~~40.~~ (New) The masonry block of Claim 9 ~~38~~ in which a handle is formed on the lower surface of the block body during the molding process, with the lower surface being at the top of the inverted block during the molding process.

12 ~~41.~~ (New) The masonry block of Claim 10 ~~39~~ in which a handle is formed on the lower surface of the block body during the molding process, with the lower surface being at the top of the inverted block during the molding process.

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